RECORDS OF INSECTS ASSOCIATED WITH *ACACIA DEALBATA* LINK. IN TASMANIA

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Abstract

New records of insects associated with *Acacia dealbata* Link. in Tasmania are presented, based on records of the Tasmanian Forest Insect Collection. Previously published records are included, making a total of 97 species from 36 families. Species of Cerambycidae, Curculionidae, Chrysomelidae, Psyllidae and Geometridae are most common on silver wattle.

Introduction

Silver wattle, *Acacia dealbata* Link., is the most common bipinnate wattle species growing in Tasmania (Costermans 1991). Considerable research interest has developed in it as a resource for pulpwood and sawlog production, as a weed in plantations of eucalypts and softwoods in Australia and as an invasive weed overseas.

Several researchers have surveyed and listed insect species associated with *A. dealbata* in the mainland states of Australia but have included few records from Tasmania. Van den Berg (1982a, b, c) collected extensively throughout the mainland for biological control agents for use in South Africa, where invasion into native vegetation and plantations was a major problem (van den Berg 1977); he listed 70 species attacking *A. dealbata*. New (1979, 1983) examined seed predation and the abundance of Coleoptera on acacias in Southern Victoria and reported that 115 morphospecies of Coleoptera had been collected in Victoria on *A. dealbata* during a three year period. Hawkeswood (1994) reviewed the biology of chrysomelids associated with *Acacia* and Webb (1994) listed the wood inhabiting insect fauna of some *Acacia* species.

Research conducted in Tasmania on the fireblight beetle, *Pyrgoides orphana* Erichson (Elliott 1978), detailed the life history and effects on growth of planted silver wattle. Bashford (1991) presented records of wood-boring Coleoptera and associated insects reared from *A. dealbata* billets from several sites in Tasmania.

This report includes only those species reared either from timber samples, from galls or feeding on foliage for at least some stage of their life cycle. Many species of Coleoptera collected have been omitted due to doubt as to their feeding status on *A. dealbata*. Consequently this list of injurious insects cannot be considered complete.

Results

The following species list (Table 1) has been compiled over a period of 20 years. It includes records from regular collections at long term survey sites on the East Coast (Elliott and Bashford, unpublished data) and incidental collecting throughout the range of *A. dealbata* in Tasmania.

Specimens of all species listed are lodged in the Tasmanian Forest Insect Collection, Forestry Tasmania.

Table 1. Insects Associated with *Acacia dealbata* in Tasmania.

A. Species injurious to *Acacia dealbata*.	References *
COLEOPTERA	
Cerambycidae	
Ambeodontus pilosus (Pascoe)	4, 5
Amphirhoe decora Newman	4, 5
Ancita crocogaster (Boisduval)	3, 4, 5
Ancita marginicollis (Boisduval)	4, 5
Aphneope quadrimaculator Poll	5
Bethelium signiferum (Newman)	4, 5
Illaena exilis Erichson	4, 5
Mecynopus cothurnatus Erichson	4, 5
Notoceresium impressiceps Blackburn	5
Phacodes personatus (Erichson)	5
Probatodes plumula (Newman)	3, 4, 5
Rhinophthalmus nasutus (Shuckard)	4, 5
Stenocentrus suturalis (Olivier)	4, 5
Syllitus grammicus (Newman)	4, 5
Tessaromma undatum Newman	NR
Zoedia divisa Pascoe	5
Curculionidae	
Belus bidentatus (Donovan)	4, 5
Belus bimaculatus Pascoe	4, 5
Orthorhinus cylindrirostris (Fabricius)	3, 4, 5
Pachyura cinerea (Blanchard)	4, 5
Pentamimus australis (Erichson)	5
Rhinotia haemoptera Kirby	NR
Saccolaemus carinicollis (Lea)	NR
Saccolaemus sp.	5
Bostrychidae	
Xylobosca bispinosa (Macleay)	5
Xylobosca canina (Blackburn)	5
Chrysomelidae	
Calomela curtisi (Kirby)	4
Calomela sp.	3
Dicranosterna immaculata (Marsham)	4
Haltica pagana Blackburn	NR
Platycolaspis australis Blackburn	NR
Pyrgoides orphana (Erichson)	2, 3, 4

Table 1. (continued)

Pyrgoides sp.A	NR
Pyrgoides sp.B	NR
Pyrgoides sp.C	NR
Lyctidae	
Trogoxylon ypsilon (Lesne)	5
Buprestidae	
*Cisseis*pauperula (Kerremans)	5
Melobasis purpurascens (Fabricius)	5
Lycidae	
Metriorrhynchus rhipidius MacLeay	NR
Bruchidae	
Melanterius sp.	3
Scarabaeidae	
Diphucephala colaspidoides (Gyllenhal)	1, 3, 4
HEMIPTERA	
Psyllidae	
Acizzia acaciaedealbatae (Froggatt)	NR
Acizzia conspicua Tuthill	NR
Acizzia sp. C	NR
Acizzia sp. D	NR
Acizzia sp. E	NR
Acizzia sp. G	NR
Acizzia sp. J	NR
Acizzia sp. K	NR
Phellopsylla sp. B	NR
Cicadidae	
Cicadetta torrida (Erichson)	NR
Psaltoda moerens (Germar)	NR
Flatidae	
Siphanita acuta (Walker)	NR
Euphanta munda (Walker)	NR
Membracidae	
Ceraon tasmaniae (Fairmaire)	NR
Pseudococcidae	
Melancoccus albizziae (Maskell)	NR
Tingidae	
Epimixia sp.	NR
HYMENOPTERA	
Pteromalidae	
Trichilogaster trilineata (Cameron)	3

Table 1. (continued)

LEPIDOPTERA	
Anthelidae	
Anthela addita Walker	NR
Anthela connexa (Walker)	3
Anthela nicothoe (Boisduval)	3
Anthela ocellata (Walker)	NR
Anthela sp.	NR
Pterolocera sp.	4
Arctiidae	
Asura cervicalis Walker	4
Lymantriidae	
Acyphas leucomelas (Walker)	3, 4
Acyphas sp.	4
Teia anartoides Walker	3, 4
Geometridae	
Boarmia sp.	4
Chlenias sp.	NR
Chlorocoma dichloraria (Guenee)	4
Dichromodes ainaria Guenee	4
Microdes squamulata Guenee	3, 4
Thalaina inscripta Walker	3, 4
Oecophoridae	
Chryptophasa albacosta Lewin	NR
Psychidae	
Lepidoscia arctiella Walker	NR
Lasiocampidae	
Pinara sp.	4
Noctuidae	
Praxis porphyretica Guenee	NR
Cossidae	
Endoxyla lituratus (Donovan)	1, 3, 4
Cosmopterigidae	
Macrobathra chrysotoxa Meyrick	NR
Lycaenidae	
Pseudalmenus chlorinda (Blanchard)	4, 7
Pseudalmenus chlorinda zephyrus Waterhouse & Lyell	6, 7
Tortricidae	
Epiphyas ashworthana (Newman)	4
Epiphyas xylodes (Meyrick)	4

Table 1. (continued)

THYSANOPTERA	
Phlaeothripidae	
Kladothrips sp.	4
B. Species which are inquilines or parasites in galls of *Acacia dealbata.*	
LEPIDOPTERA	
Gracillariidae	
Acrocercops eumetalla Meyrick	NR
Tineidae	
Comodica mystacinella Walker	NR
Pyralidae	
Gauna aegusalis Walker	NR
Tortricidae	
Holocola triangulana Meyrick	NR
Oecophoridae	
Stathmopoda cephalaea Meyrick	NR
HYMENOPTERA	
Pteromalidae	
Coelocyba sp.	NR
Ormyromorpha sp.	NR
Eulopidae	
Chrysoatomus sp.	NR
Tetrastichus sp.	NR
Torymidae	
Megastigmus sp.	NR
Bethylidae	
Sierola sp.	NR
Ichneumonidae	
Delopia sp.	NR

* 1 = Evans (1943); 2 = Elliott (1978); 3 = Elliott and de Little (1985); 4 = Bashford (1990); 5 = Bashford (1991); 6 = Bashford (1993); 7 = Couchman and Couchman (1977); NR = New record for Tasmania.

Discussion

Many of the species listed have been previously recorded on the mainland on a range of wattle species by van den Berg (1982), New (1979), Webb (1994) and Hunt *et al.* (1996). All of the Lepidoptera listed from *Uromycladium* galls have been reared by New (1982) in the Melbourne area from galls on *A. decurrens.* Trees infested by these fungal galls are often severely debilitated.

There is an increased interest in the establishment of *A. dealbata* plantations in Tasmania, on the mainland and overseas for the production of a wide range of timber products. Knowledge of the insect species which are or have potential to become pest species in a plantation situation is important and would be of value to tree growers both overseas and in Australia for possible integrated pest management (IPM) development. Several of the species recorded from Tasmania are recognised as impediments to plantation establishment; for example *Pyrgoides orphana*, a chrysomelid beetle which causes reduced growth increment and, with repeated defoliation, death of trees.

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